IN THE CLAIMS

Please amend the claims as follows:

1.   (Currently Amended) A system comprising:

a message server ~~having no persistent state such that the message server can~~ that is configured to be restarted after a failure without performing state recovery operations; and

a plurality of instances of an application server coupled in a star topology with the message server at a center of the star topology, the message server handling communications between the plurality of instances of the application server, [[,]] one or more of the plurality of instances to register or reregister instance-specific information with the message server upon a starting or restarting, respectively, of the message server, the instance-specific information ~~including an~~ identifying one or more services ~~instance number, the instance number identifying the associated~~ that the one or more of the plurality of instances is configured to provide to each of the plurality of instances ~~to the message server~~.

2.   (Currently Amended) The system of claim 1 wherein each of the plurality of instances comprises:

a dispatcher node; and

a plurality of server nodes.

3.   (Currently Amended) The system of claim 2 wherein each of the plurality of server nodes comprises [[:]] a java 2 enterprise edition (J2EE) engine.

4.   (Currently Amended) The system of claim 1 further comprising [[:]] a central lock server to provide cluster wide locks to the plurality of instances.

5.   (Currently Amended) The system of claim 1 wherein the message server comprises:

a first data structure to store a list of connected clients; and

a second data structure [[and]] to store a list of services provided in the system.

6.   (Currently Amended) A non-transitory computer readable storage media containing executable computer program instructions which when executed cause a digital processing system to perform a method comprising:

starting a central services node to provide a locking service and a messaging service, the
        messaging service configured to be restarted after a failure without performing state
        recovery operations having no persistent state, the messaging service handling
        communications between a plurality of application server instances;

starting the plurality of application server instances;

organizing the application server instances into a cluster having star topology with the central
        services node at a center of the star topology; and

registering or reregistering instance-specific information with the central services node upon
        starting or restarting, respectively, of the central services node, the registering or
        registering initiated by one or more of the plurality of application server instances, the
        instance-specific information including an identifying one or more services instance
        number, the instance number identifying the associated that the one or more of the
        plurality of application server instances are configured to provide to each of the plurality
        of application server instances to the message server.

7.   (Currently Amended) The non-transitory computer readable storage media of claim 6, containing executable computer program instructions which when executed cause a digital processing system to perform the method further comprising[[:]] sharing a database among the plurality of application server instances.

8.   (Currently Amended) The non-transitory computer readable storage media of 6, containing executable computer program instructions which when executed cause a digital processing system to perform the method wherein starting a plurality of application server instances comprises[[:]] starting, for each application server instance of the plurality, a dispatcher node and a plurality of server nodes.

AMENDMENT AND RESPONSE UNDER 37 C.F.R § 1.111
Serial Number:10/750,002
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9.   (Currently Amended) The non-transitory computer readable storage media of claim 6, ~~containing executable computer program instructions which when executed cause a digital processing system to perform~~ the method further comprising[[:]] starting a message server having no persistent state.

10.   (Canceled)

11.   (Currently Amended) The non-transitory computer readable storage media of claim 6, ~~containing executable computer program instructions which when executed cause a digital processing system to perform~~ the method further comprising[[:]] conducting inter instance communication through the messaging service.

12.   (Currently Amended) The non-transitory computer readable storage media of claim 9, ~~containing executable computer program instructions which when executed cause a digital processing system to perform~~ the method further comprising[[:]] restarting the message server without state recovery responsive to a system failure.

13.   (Currently Amended) The non-transitory computer readable storage media of claim 10, ~~containing executable computer program instructions which when executed cause a digital processing system to perform~~ the method further comprising[[:]] notifying all registered instances from the message server when an additional instance joins the cluster.

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14.   (Currently Amended) A system comprising:

means for organizing a plurality of application servers instances into a cluster having a star

topology with a central services node at a center of the star topology;

means for sharing a storage resource across the cluster; and

means for performing centralized inter instances communication <u>that is configured to be restarted</u>

<u>after a failure without performing state recovery operations</u> ~~without maintenance of~~

~~persistent state information~~, the inter instances communication including registering or

reregistering <u>of</u> instance-specific information with the central services node upon a

starting or restarting, respectively, of the central services node, the registering or

reregistering initiated by one or more of the plurality of application server instances, the

instance-specific information ~~including an~~ <u>identifying one or more</u> ~~instance number~~

~~services, the instance number identifying the~~ ~~associated instance~~ <u>that the one or more of</u>

<u>the plurality of application server instances are configured to provide to each of the</u>

<u>plurality of application server instances</u> ~~to the message server~~.

15.   (Currently Amended) The system of claim 14 further comprising[[:]] means for

~~centralized~~ <u>centrally</u> locking [[of]] a resource within the cluster.

16.   (Currently Amended) The system of claim 14 wherein the means for performing

comprises[[:]] a message server having no persistent state.

17.   (Currently Amended) The system of claim 14 wherein the means for performing

comprises[[:]] means for recording services provided in the cluster.

18.   (Currently Amended) A method comprising:

starting a central services node to provide a locking service and a messaging service, the

messaging service being configured to be restarted after a failure without performing

state recovery operations not maintaining a persistent state, the messaging service

handling communications between a plurality of application server instances;

starting [[a]] the plurality of application server instances;

organizing the plurality of application server instances into a cluster having a star topology with

the central services node at a center of the star topology; and

registering or reregistering instance-specific information with the central services node upon a

starting or a restarting, respectively, of the central services node, the registering or

reregistering initiated by one or more of the plurality of application server instances, the

instance-specific information including an identifying one or more instance number

services, the instance number identifying the associated instance the one or more of the

plurality of application server instances are configured to provide to each of the plurality

of application server instances to the message server.

19.   (Currently Amended) The method of claim 18 further comprising[[:]] sharing a database

among the plurality of application server instances.

20.   (Currently Amended) The method of claim 18 wherein starting a plurality of application

server instances comprises[[:]] starting, for each instance of the plurality, a dispatcher node and a

plurality of server nodes.

21.   (Currently Amended) The method of claim 18 wherein starting a central service node

comprises: starting a the message server having messaging service has no persistent state.

22.   (Canceled)

23.   (Currently Amended) The method of claim 18 further comprising[[:]] conducting inter

instance communication through the messaging service.

24.   (Currently Amended) The method of claim 21 further comprising[[:]] restarting the message server without state recovery responsive to a system failure.

25.   (Currently Amended) The method of claim 22 wherein organizing further comprises[[:]] notifying all registered instances from the message server when an additional instance joins the cluster.

26.   (Canceled)

27.   (Canceled)

28.   (Currently Amended) The system of claim [[26]] 18, ~~wherein~~ further comprising notifying each of the ~~registered~~ plurality of application server instances ~~is notified by the message server when an additional instance registers with the message server~~ of the registering or reregistering of the instance-specific information.

29.   (Previously Presented) The system of claim 1, wherein each of the plurality of instances is started using a first instance-specific bootstrap logic, the first instance-specific bootstrap logic synchronized with a second instance-specific bootstrap logic stored in the database.

30.   (Previously Presented) The system of claim 1, wherein a node within the plurality of instances is started using a first node-specific bootstrap logic, the first node-specific bootstrap logic synchronized with a second node-specific bootstrap logic stored in the database.

31.   (Previously Presented) The method of claim 18, wherein the instance-specific information further includes information about a new service that the one or more of the plurality of instances provide.

32.   (Previously Presented) The system of claim 1, wherein the plurality of instances are unable to communicate with each other during a failure of the message server.